

DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 3-22 and 24-30 are allowed.
2. The following is an examiner's statement of reasons for allowance.
 - Based on THE BOARD OF PATENT APPEALS AND INTERFERENCES decision, dated 9/30/2009.
 - The prior art fails to teach an apparatus of Claims 1, 5, 9, 11, 12, 22 and 30 that specifically comprises the following:
 - The instant application is deemed to be directed to a non-obvious improvement over the admitted prior art of the instant application and the invention patented in Pat. No. US 6,363,109 and US 6,445,731.

The improvement comprises:

With regard Claim 1, "establishing a least-SNR requirement, determining said SNR for each of said subchannels in said plurality of subchannels within said wideband channel, and designating each of said subchannels having an SNR greater than said least-SNR requirement as a clear subchannel;" as recited in combination with other limitation in claim 1,

With regard Claim 5, "determining said SNR for each of said subchannels in said plurality of subchannels within said wideband channel, and designating each of said subchannels having an SNR

greater than said adjusted least-SNR requirement as an impeded subchannel; " as recited in combination with other limitation in claim 5,

With regard Claim 9, "determining said SNR for each of said subchannels in said plurality of subchannels within said wideband channel in response to said scanning activity, comprising ascertaining usable ones of said subchannels in response to said SNR of each of said subchannels, and estimating a bit error rate for each of said usable subchannels;" as recited in combination with other limitation in claim 9,

With regard Claim 11, "determining said SNR for each of said subchannels in said plurality of subchannels within said wideband channel in response to said scanning activity, comprising ascertaining usable ones of said subchannels in response to said SNR of each of said subchannels, and estimating a throughput for each of said usable subchannels;" as recited in combination with other limitation in claim 11,

With regard Claim 12, "wherein said transmitting activity transmits said OFDM data over the plurality of subchannels, from which more than one user channel is formed and concurrently supported. " as recited in combination with other limitation in claim 12,

With regard Claim 22, "an OFDM transmitter in communication with said OFDM receiver and configured to transmit OFDM data so that said OFDM receiver receives said OFDM data in each subchannel within said plurality of subchannels within said wideband channel at one of a zero

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subchannel signal level, a predefined maximum subchannel signal level which is greater than the zero subchannel signal level, and a predefined intermediate subchannel signal level which is greater than the zero subchannel signal level and less than the maximum subchannel signal level in response to said SNR therein." as recited in combination with other limitation in claim 22, and

With regard Claim 30, "designating as a clear subchannel each of said subchannels in which said SNR is greater than or equal to a first least-SNR requirement; designating as an impeded subchannel each of said subchannels in which said SNR is less than said first least-SNR threshold and greater than or equal to a second least-SNR requirement; designating as an obstructed subchannel each of said subchannels not designated as one of said clear subchannels and said impeded subchannels;" as recited in combination with other limitation in claim 30.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is (571) 272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/Ted M Wang/
Primary Examiner, Art Unit 2611